IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	)	Docket No.: 30644
SANTOS, Susan R. et al.	)	Group Art Unit No.: 3623
Serial No.: 09/751,858	)	Examiner: MEINECKE DIAZ, Susanna
Filed: December 29, 2000	)	Confirmation No.: 8518
Title:	)	
A SYSTEM AND METHOD FOR MONITORING AND ANALYZING DATA TRENDS OF INTEREST WITHIN AN ORGANIZATION	)	

APPEAL BRIEF

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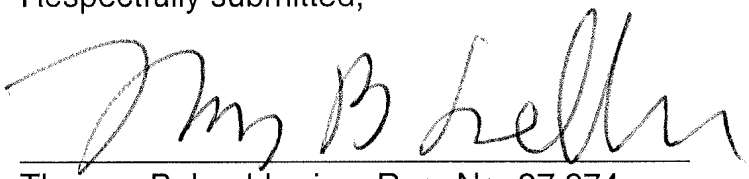
APPELLANT'S BRIEF ON APPEAL

In response to the Office Action dated November 22, 2005, and the Notice of Appeal filed April 21, 2006, Appellant's Brief on Appeal in accordance with 37 C.F.R. § 41.37 is hereby submitted. The Examiner's rejections of claims 1–21 and 27 as last amended are herein appealed, and allowance of said claims is respectfully requested.

The requisite fee of $500.00 as required by 37 C.F.R. § 41.20 accompanies this Brief. Any additional fee which is due in connection with this application should be applied against Deposit Account No. 19-0522.

Respectfully submitted,

By 

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ATTORNEYS FOR APPELLANTS

Following are the requisite statements under 37 C.F.R. § 41.37:

I. Real Party in Interest

Susan R. Santos, Stephen D. Simon, and Karen Cox are the inventors of the claimed invention. Susan R. Santos, Stephen D. Simon, and Karen Cox have assigned all of their rights, title, and interest in the invention, application, and any Letters Patent issuing therefrom to THE CHILDREN'S MERCY HOSPITAL, a corporation duly organized under the laws of the State of Missouri. Therefore, THE CHILDREN'S MERCY HOSPITAL is the real party in interest.

II. Related Appeals and Interferences

There are no related appeals or interferences.

III. Status of Claims

This application was filed with 21 claims, of which claims 1, 7, 12, and 17 were independent. In an amendment dated February 22, 2005, new claims 22–25 were added. In an amendment dated October 21, 2005, claims 22–26 were cancelled. Therefore, claims 1–21 and 27 are currently pending with claims 1, 7, 12, and 17 being independent. The rejection of claims 1–21 and 27 is herein appealed.

IV. Status of Amendments

All amendments submitted by the Appellant have been entered.

V. Summary of Claimed Subject Matter

The invention of claim 1 is directed to a system for facilitating statistical analysis of events. The system broadly comprises a first input device, a memory storage device, a computer-readable medium, a display device, and a second input device. The first input device is operable to receive raw data regarding the events, including the nature, place, time, and date of each event, and to convert the raw data into formatted data having a suitable electronic format. Application, page 9, line 26 page 10, line 2. The memory storage device is operable to store the formatted data. *Id.*, page 10, lines 3–10.

The computer-readable medium is encoded with a code segment operable to enable a computer to perform date gap analysis and control chart analysis on the formatted data and make workload adjustments thereto to produce an analysis output, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, and wherein the output indicates a value for each elapsed time and a value for the average elapsed time. Application, page 10, line 11 – page 12, line 27. The display device is operable to display the analysis output. *Id.*, page 11, lines 24–28. The second input device is operable to allow a user to request a more specific analysis of at least one identified event, with the identified event being user-selected from the display. *Id.*, page 12, line 28 – page 13, line 22.

The invention of claim 7 is a combination of computer code segments stored on computer readable memory and executable using at least one computer and operable to facilitate statistical analysis of events. The combination of code segments comprises a code segment for receiving data regarding the events (application, page 13, line 23 – page 14, line 10), and at least one code segment for performing date gap analysis and control chart analysis on the data and for adjusting the data for workload and for producing an analysis output, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, and wherein the output indicates a value for each elapsed time and a value for the average elapsed time (*Id.*, page 13, lines 23–29; page 14, lines 11–30).

The combination of code segments further comprises a code segment for displaying the analysis output as a chart (*Id.*, page 13, lines 23–29; page 14, line 31 – page 15, line 5); and a code segment for receiving input requesting a more specific analysis of at least one identified portion of the data, with the identified portion being selected from the chart, and a code segment for performing the more specific analysis, producing detailed analysis output, and displaying the detailed analysis output (*Id.*, page 13, lines 23–29; page 15, lines 6–10).

The invention of claim 12 is a method for facilitating monitoring and analysis of events. The method comprises the steps of obtaining data regarding the events (application, page 13, line 23 – page 14, line 10); formatting the data in a common format (*id.*, page 7, lines 14–16); and performing date gap analysis on the data with a computer processor, wherein the date gap analysis includes determining an elapsed time between

consecutive events and an average elapsed time (*id.*, page 13, lines 23–29; page 10, lines 11–18).

The method further comprises the steps of performing control chart analysis on the data with a computer processor *(id.*, page 13, lines 23–29; page 10, lines 19–26); adjusting the data for work load (*id.*, page 13, lines 23–29; page 11, lines 7–23); displaying the data, including a value for each elapsed time and a value for the average elapsed time (*id.*, page 11, line 29 – page 12, line 3); and responding to a request for a more specific analysis of at least one event selected from the displayed data by displaying information specifically regarding the identified event (*id.*, page 15, lines 6–10).

The invention of claim 17 is a method for facilitating statistical analysis of events, the analysis being performed on data representing different types of events. The method comprises the steps of (a) obtaining the data regarding the events, with the nature of the data depending on the type of event (application, page 13, line 30 – page 14, line 3); (b) storing the data in different data sets (*id.*, page 14, lines 4–10); and (c) producing output by performing date gap analysis and control chart analysis on at least one data set with a computer processor and adjusting the data set for workload, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, and wherein the output indicates a value for each elapsed time and a value for the average elapsed time *(id.*, page 11, lines 7–23; page 11, line 29 – page 12, line 13).

The method further comprises the steps of (d) displaying the output as a chart *(id.*, page 11, lines 24–28); and (e) responding to a request for a more specific analysis of at least one identified event in the data set, the identified event being selected from the chart produced in step (d), by displaying information specifically regarding the identified event. *Id.*, page 12, line 28 – page 13, line 22.

VI. Grounds of Rejection to be Reviewed on Appeal

Claims 1–21 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jensen (U.S. Patent No. 6,065,000) in view of Pfeiffer ("Safety Plan Nets Results at Teksid," July 1998).

VII. Argument

A. Summary of U.S. Patent No. 6,065,000 to Jensen

Jensen discloses a computer-based process of reporting workplace injuries. The system allows users to submit injury information via electronic forms and view reports of injuries according to various formats. (Col. 3, lines 27–40). Figures 5–7 illustrate graphical reports, while FIGs. 8–10 illustrate textual reports with graphical status indicators (reference numeral 74, FIG. 8). (Col. 4, lines 22–26). Jensen claims to advance the art by creating and interrelating "predefined lists of the possible variables used in accident reporting to repeatably produce consistent accident reports," and by "using a plurality of defined lists of such variables stored on a computer" to "produce incident reports." (Col. 1, lines 47–60). Tables 1–3 of Jensen illustrate list variables stored in a system database, and table 4 illustrates variables stored in an incident database.

A first use of the lists disclosed in Jensen is to automatically complete records, such as where the system automatically adds a worker's manager, insurer, and special medical issues to an incident report that contains only the worker's name and the type of incident. (Col. 5, lines 1–9). Jensen also discloses using the lists to compare incidents. If a user is submitting or viewing information about a first incident, for example, the system may automatically display records of similar incidents. (Col. 5, lines 17–28). Furthermore, Jensen teaches allowing a user to "specify specific information for extraction" from records contained in the lists for editing. (Col. 12, line 65 – col. 13, line 14).

Jensen includes a total of 71 figures, but merely describes FIGs. 12–71 as "illustrations from the operating instructions of a preferred embodiment of the invention" without providing any more information.

B. Summary of Pfeiffer's article titled "Safety Plan Nets Results at Teksid"

The Pfeiffer article is approximately one and one-half pages in length and provides an overview of safety procedures and training used by a company called Teksid Aluminum Foundry Inc. ("TAF"). According to Pfeiffer, TAF has established "a comprehensive Safety and Health Program designed to focus safety at the operator level and establish accountability for everyone." (Page 1). One of the methods TAF uses involves publicizing

the company's safety record throughout the plant so that employees are aware of it. Pfeiffer states on page two:

> TAF displays recordable incidents per month and days since the last lost time incident throughout the plant. Additionally, recordable incidents, lost time rates, and departmental safety goals are communicated monthly. All associates are intimately aware of the plant's safety performance compared to other foundries and strive everyday to continue to out-perform their goals. The foundry has invited Tennessee OSHA into the facility to conduct training for its associates to continue improving worker safety.

While Pfeiffer discloses displaying the total number of incidents per month and the number of days since the most recent accident, it does not disclose any type of automated processing or presentation of workplace injury information.

C. Summary of Arguments

Appellant respectfully submits that the Examiner's rejections should not be sustained because:

1. the Examiner has failed to cite a reference or combination of references that teaches or suggests each limitation of claim 1 and claim 12;

2. the Examiner has failed to cite a reference or combination of references that teaches or suggests each limitation of claim 7 and claim 17;

3. the Examiner has failed to cite a reference or combination of references that teaches or suggests each limitation of claim 11;

4. the Examiner has failed to cite a reference or combination of references that teaches or suggests each limitation of claim 20;

5. the Examiner has failed to cite a reference or combination of references that teaches or suggests each limitation of claim 21; and

6. the Examiner has failed to cite a reference or combination of references that teaches or suggests each limitation of claim 27.

D. Legal Discussion of Obviousness

Obviousness can be a problematic basis for rejection because the Examiner, in deciding that a feature is obvious, has the benefit of the Applicant's disclosure as a blueprint and guide. In contrast, one with ordinary skill in the art would have no such

guide, in which light even an exceedingly complex solution may seem easy or obvious. Furthermore, once an obviousness rejection has been made, the Applicant is in the exceedingly difficult position of having to prove a negative proposition (i.e., non-obviousness) in order to overcome the rejection. For these reasons, MPEP § 2142 places upon the Examiner the initial burden of establishing a *prima facie* case, which requires, among other things, that there be identified some motivation or suggestion in the prior art or in the knowledge of one with ordinary skill to modify the reference or to combine reference teachings. If the Examiner fails to establish the requisite *prima facie* case, the rejection is improper and will be overturned. *See In re Rijckaert,* 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). Only if the Examiner's burden is met does the burden shift to the Applicant to provide evidence to refute the rejection.

More specifically, three criteria must be satisfied in order to establish a *prima facie* case of obviousness: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine their teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or combination of references) must teach or suggest all the claim limitations. *See* MPEP §706.02(j), citing *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991). Furthermore, "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch,* 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992) (reversing an obviousness rejection where there was no suggestion to modify a prior art mower strip to make it entirely flexible as required by applicant's claims toward a flexible landscape edging strip); *see also In re Gordon*, 221 USPQ2d 1125, 1127 (Fed. Cir. 1984). Additionally, "if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." MPEP § 2143.01. Further yet, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

In meeting this initial burden, the Examiner "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *In re Fine*, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988). There are three possible sources for a proper motivation to combine references: "the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." MPEP § 2143.01 (citing *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998)). Thus, "[m]easuring a claimed invention against the standard established by section 103 requires the oft-difficult but critical step of casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field." *See e.g., W. L. Gore & Assoc., Inc. v. Garlock, Inc.*, 220 USPQ 303, 313 (Fed. Cir. 1983).

E. The Examiner has failed, with regard to the rejection of independent claims 1 and 12 under 35 U.S.C. § 103(a) over Jensen in view of Pfeiffer, to establish the requisite *prima facie* case of obviousness because the Examiner has failed to cite a reference or combination of references that teach or suggest all the limitations of claims 1 and 12.

Regarding the rejection of claim 1, none of the prior art references teach or suggest at least the limitations of 1) *a computer-readable medium encoded with a code segment operable to enable a computer to perform date gap analysis and control chart analysis on the formatted data and make workload adjustments thereto to produce an analysis output, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, and wherein the output indicates a value for each elapsed time and a value for the average elapsed time* and 2) *a second input device operable to allow a user to request a more specific analysis of at least one identified event, with the identified event being user-selected from the display.*

Appellants first assert that neither of the prior art references relied upon by the Examiner mention anything remotely related to making workload adjustments to data, much less making workload adjustments, performing date gap analysis, and performing control chart analysis on the same data. Appellants note that the workload adjustments are made to <u>data</u>, to indicate, for example, "whether workload was a factor in causing [a]

signal." (Application, page 11, lines 7–8). Neither Jensen nor Pfeiffer teaches or suggests this aspect of the invention of claim 1.

Jensen discloses a system that maintains standardized lists of variables relating to workplace injuries, allowing users to access and update the lists, and allowing users to define custom reports that draw upon list variables. Jensen makes no mention of workload or the effects of workload on data analysis, much less a computer program to "make workload adjustments" to data. Pfeiffer discloses particular safety procedures and training implemented by the Teksid Aluminum Foundry and is utterly unrelated to computer-based statistical analysis of events. Thus, neither Jensen nor Pfieffer, considered singly or in combination, teach or suggest making workload adjustments to data, either manually or by use of a computer.

The Examiner concedes that "Jensen does not expressly teach that a code segment makes workload adjustments based on [date gap and control chart] analyses," but argues that it would have been obvious to modify Jensen to include this aspect of the invention. To arrive at this conclusion, the Examiner goes through various steps of reasoning. The Examiner first argues that "it is old and well-known in the art of workplace management to adjust workloads accordingly in response to dangerous working conditions," and gives as an example reducing the number of hours worked by nurses, drivers, and so forth in response to increased accidents (Office Action dated 11-22-05, pages 4–5). The Examiner then argues that because "Jensen is directed toward analysis of workplace-related injury and accident statistics . . .", it would have been obvious to one of ordinary skill in the art to modify Jensen to "generate corrective actions involving workload adjustments in order to extend the usefulness of Jensen's invention . . ." (Office Action dated 11-22-05, page 5). The Examiner then asserts that computer automation of well-known processes is known in the art, and that

> it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Jensen's computer system code segment to make the workload adjustments based on data gap analysis and control chart analysis in order to facilitate more rapid, efficient, and accurate performance of the workload adjustments as opposed to if they were performed entirely by hand.

(Office Action dated 11-22-05, page 5).

The Examiner's reasoning and conclusions are flawed. In arguing, for example, that it would have been obvious to one of ordinary skill in the art to modify Jensen to "generate corrective actions involving workload adjustments in order to extend the usefulness of Jensen's invention," the Examiner is attempting to redesign the system disclosed in Jensen from a data standardization and reporting system to a system for generating solutions to the problem of workplace injuries. This proposed redesign assumes that merely adjusting the workload of employees would suffice as a solution to the problem of workplace injuries. This assumption finds no support in either Jensen or Pfeiffer.

Even assuming the Examiner's arguments are correct, however, *the Examiner has failed to address the language of claim 1.* Claim 1 recites that the code segment is operable to enable a computer to "perform date gap analysis and control chart analysis on the formatted data and make workload adjustments thereto" (emphasis added). Thus, the invention of claim 1 enables a computer to make workload adjustments to ***data***. The Examiner, in contrast, argues that it would be obvious to adjust actual workloads, such as the workload of "doctors, nurses, truck drivers, etc." It will be appreciated that making workload adjustments to data as part of statistical analysis of the data is an entirely different matter than adjusting an actual workload of a worker. As explained in the application, for example, making workload adjustments to data involves computing a daily cumulative total of full-time employees (FTE) for each day, such that the difference between the cumulative number at the time of the event and the cumulative number at the time of the previous event represents the number of full-time employee days between events. FTE days can then be used to represent time between events instead of calendar or work days.

Thus, even if the Examiner's arguments are assumed to be correct, the Examiner has still failed to cite a reference or combination of references that teach or suggest a code segment operable to make workload adjustments to data, as recited in claim 1.

The Examiner has also failed to cite a reference or combination of references that teach or suggest "a computer-readable medium encoded with a code segment operable to enable a computer to perform date gap analysis and control chart analysis" on formatted data, wherein "the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time," as recited in claim 1. While Jensen

discloses graphs illustrating accident frequency by day of week and by time of day (Jensen, Figs. 7,69), Jensen makes no reference to a code segment that determines *elapsed time between consecutive events and an average elapsed time* or generates an *output indicating a value* for each elapsed time and the average elapsed time. Viewing the output generated by the system disclosed in Jensen, for example, a user would not know how much time transpired between any two events. In fact, using the system disclosed in Jensen, a user would need to *manually* determine a date for each event in question by looking at individual accident reports (*see* Jensen, Fig. 3), *manually* create an elapsed time between consecutive events by determining a time between events, and *manually* record each elapsed time, to achieve what the code segment of claim 1 performs *automatically*. The application invention as recited in claim 1, therefore, clearly presents a distinct advance in the art of data analysis.

Pfeiffer discloses displaying "recordable incidents per month and days since the last lost time incident" for employees to see, but fails to mention a code segment that is operable to determine an elapsed time between consecutive events and an average elapsed time.

The Examiner has also failed to cite a reference or combination of references that teach or suggest "a second input device operable to allow a user to request a more specific analysis of at least one identified event, with the identified event being user-selected from the display." The Examiner argues that this limitation is disclosed in Jensen at FIG. 43, col. 3, lines 12–15, and col. 13, lines 1–12. Specifically, the Examiner argues that a "user may access additional information regarding a particular event. For example, Fig. 43 shows a "Performance Analysis" section that summarizes accidents associated with a given individual. "Advanced Investigation," i.e., further analysis, may also be requested." (Office Action dated 11-22-05, page 4).

As explained above, Jensen does not describe the object illustrated in FIG. 43, except that FIGs. 12–71 "are illustrations from the operating instructions of a preferred embodiment of the invention." (Jensen, col. 2, lines 41–42). Therefore, the actual functionality (if any) of the object depicted in FIG. 43 is speculative.

The Examiner appears to be assuming that the object of FIG. 43 is an interactive user interface. Even assuming that the object of FIG. 43 is some kind of a user interface

associated with a computer, neither FIG. 43 nor any other portion of Jensen teaches or suggests "a second input device operable to allow a user to request a more specific analysis of at least one identified event, with the identified event being user-selected from the display," as recited in claim 1. First, the "Advanced Investigation" label illustrated in FIG. 43 is separate from the "Performance Analysis" section, and there is no indication that the two are related. Therefore, the Examiner's assertion that the "Advanced Investigation" label relates to the "Performance Analysis" is pure speculation unsupported by fact.

Second, it appears more likely that the "Advanced Investigation" label relates to the object depicted in FIG. 41, which is labeled "Advanced Accident Investigation." The object of FIG. 41 includes a "Record Lookup" section and thus may depict a user interface that allows users to retrieve incident records. If so, this merely allows a user to request retrieval of a record, not a "more specific analysis" as recited in claim 1. While the invention of claim 1 provides for two layers of automated analysis—the initial data gap analysis, control chart analysis, and workload adjustment performed on the data, plus the more specific analysis relating to an event—Jensen fails to teach or suggest even a single layer of automated analysis.

Pfeiffer fails to disclose any type of automated event analysis and therefore does not cure Jensen's deficiencies. Thus, neither Jensen nor Pfeiffer, considered singly or in combination, teach or suggest "a second input device operable to allow a user to request a more specific analysis of at least one identified event, with the identified event being user-selected from the display."

Furthermore, there is no motivation or suggestion to modify Jensen as proposed by the Examiner because Jensen is fundamentally different than the application invention. The process disclosed in Jensen, for example, is intended to standardize the reporting of workplace incidents by using various pre-determined lists of variables to assist users in creating workplace reports. (Jensen, col. 1, lines 14–58; col. 4 lines 46–59). The system recited in claim 1, in contrast, advances the art by using special analysis techniques to recognize trends and patterns in data collected over a period of time. Thus, while both inventions may be used in similar environments, the application invention focuses on new and improved data *analysis* and *presentation* techniques, while Jensen focuses on ensuring data *consistency* and *standardization*.

Thus, the Examiner has failed to cite a reference or combination of references that teach or suggest the limitations of 1) *a computer-readable medium encoded with a code segment operable to enable a computer to perform date gap analysis and control chart analysis on the formatted data and make workload adjustments thereto to produce an analysis output, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, and wherein the output indicates a value for each elapsed time and a value for the average elapsed time* and 2) *a second input device operable to allow a user to request a more specific analysis of at least one identified event, with the identified event being user-selected from the display*, as recited in claim 1.

Claim 12 recites limitations similar to those of claim 1 discussed above, therefore the arguments set forth above in relation to claim 1 also apply to claim 12.

F. The Examiner has failed, with regard to the rejection of claims 7 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Jensen in view of Pfeiffer, to establish the requisite *prima facie* case of obviousness because the Examiner has failed to site a reference or combination of references that teach or suggest all of the limitations of claims 7 and 17.

Regarding the rejection of claim 7, none of the prior art references teach or suggest at least the limitations of 1) *at least one code segment for performing date gap analysis and control chart analysis on the data and for adjusting the data for workload and for producing an analysis output, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, and wherein the output indicates a value for each elapsed time and a value for the average elapsed time* and 2) *a code segment for receiving input requesting a more specific analysis of at least one identified portion of the data, with the identified portion being selected from the chart.*

Adjusting data for workload, performing date gap analysis, and receiving an input requesting a more specific analysis are discussed above in relation to the rejection of claim 1, therefore those arguments apply to claim 7 as well. Furthermore, claim 7 recites that the more specific analysis is performed on at least one identified portion of the data, "with

the identified portion being selected from the chart." Thus, the invention of claim 7 provides for the selection of a portion of data *from a chart*, wherein the chart includes the results of date gap and control chart analyses, and wherein the invention includes a code segment for performing a *more specific analysis* on the data selected from the chart.

In rejecting claim 7, the Examiner merely reasserted the arguments for rejecting claim 1. Therefore, it is not clear to Appellants what grounds Examiner may have for rejecting claim 7, which includes limitations not present in claims 1–6. Nevertheless, the prior art clearly does not teach or suggest performing a more specific analysis on an "identified portion [of data] . . . selected from the chart" as recited in claim 7. Jensen discloses graphical accident reports, such as in FIGs. 6 and 7, but does not teach that a more specific analysis may be performed on a portion of the data contained within those reports, or that the portion of data may be selected from the reports themselves. Rather, Jensen teaches that users must create custom reports by, for example, specifying "specific information for extraction" from incident records. (Jensen, col. 13, lines 2–5).

Thus, the Examiner has failed to cite a reference or combination of references that teach or suggest performing a more specific analysis on an "identified portion [of data] . . . selected from the chart" as recited in claim 1. Claim 17 recites limitations similar to those of claim 7, therefore the arguments set forth herein relating to claim 7 also apply to claim 17.

G. The Examiner has failed, with regard to the rejection of claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Jensen in view of Pfeiffer, to establish the requisite *prima facie* case of obviousness because the Examiner has failed to site a reference or combination of references that teach or suggest each limitation of claim 11.

Claim 11 depends from claim 7, therefore the arguments set forth above in relation to claim 7 apply to claim 11. In addition to failing to teach or suggest all of the limitations of claim 7, the prior art further fails to teach or suggest the limitations recited in claim 11. Claim 11 further recites "the more specific analysis involving performing date gap analysis, control chart analysis, and workload adjustment on the identified portion of the data."

Again, in rejecting claim 11, the Examiner merely reasserted the arguments for rejecting claims 1–6. Therefore, it is not clear to Appellants what grounds Examiner may have for rejecting claim 11, which recites limitations not present in claims 1–6.

Nevertheless, the prior art clearly does not teach or suggest "the more specific analysis involving date gap analysis, control chart analysis, and workload adjustment on the identified portion of the data" as recited in claim 11.

Claim 11 requires performing date gap analysis and control chart analysis on data and adjusting the data for workload, and receiving input requesting more specific analysis of a portion of the data, wherein the more specific analysis includes ***additional*** date gap analysis, control chart analysis, and workload adjustment. In other words, the invention of claim 11 performs a first date gap analysis, control chart analysis, and work load adjustment on an entire data set, and second date gap analysis, control chart analysis, and work load adjustment on a portion of the data set selected from a chart representing the results of the first analyses and adjustments.

As explained above, the prior art fails to teach or suggest use of date gap analysis, control chart analysis, and workload adjustment on a data set, and further fails to teach or suggest a more specific analysis performed on a portion of a data set. Thus, neither Jensen nor Pfeiffer, considered singly or in combination, teaches or suggests the additional date gap analysis, control chart analysis, or workload adjustment as recited in claim 11.

H. The Examiner has failed, with regard to the rejection of claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Jensen in view of Pfeiffer, to establish the requisite *prima facie* case of obviousness because the Examiner has failed to site a reference or combination of references that teach or suggest each limitation of claim 20.

Claim 20 depends from claim 17, therefore the arguments set forth above in relation to claim 7—which also apply to claim 17—apply to claim 20. In addition to failing to teach or suggest all of the limitations of claim 17, the prior art further fails to teach or suggest the limitations recited in claim 20. Claim 20 further recites the step of "including performing date gap analysis, control chart analysis, and workload adjustment on the identified event, as in step (c), and displaying the resulting chart." Claim 11 also recites performing additional date gap analysis, control chart analysis, and workload adjustment on a portion of pre-analyzed data, therefore the arguments set for above against the rejection of claim 11 also apply to the rejection of claim 20.

Claim 20 further recites "displaying the resulting chart" relating to the additional date gap analysis, control chart analysis, and work load adjustment. Thus, the invention of claim 20 not only performs the additional analyses, but further provides a chart resulting form the additional analyses in addition to the chart related to the first analyses. This additional aspect of the invention is clearly not taught or suggested by the prior art.

I. The Examiner has failed, with regard to the rejection of claim 21 under 35 U.S.C. § 103(a) as being unpatentable over Jensen in view of Pfeiffer, to establish the requisite *prima facie* case of obviousness because the Examiner has failed to site a reference or combination of references that teach or suggest each limitation of claim 21.

Claim 21 depends from claim 17, therefore the arguments set forth above in relation to claim 7—which also apply to claim 17—apply to claim 21. In addition to failing to teach or suggest all of the limitations of claim 17, the prior art further fails to teach or suggest the limitations recited in claim 21. Claim 21 further recites the step of "responding to a request to perform steps (c) through (e) on different data sets by performing steps (c) through (e) on the different data sets and displaying simultaneously the resulting charts." Claim 20 also recites provided a chart resulting from additional analyses in addition to a chart related to first analyses, therefore the arguments set forth above in relation to claim 20 also apply to claim 21.

Claim 21 recites the additional limitation of performing the date gape analysis, control chart analysis, and workload adjustment on <u>different</u> data sets and <u>simultaneously</u> displaying charts resulting from each of the analyses. Because the prior art does not teach or suggest performing date gap analysis, control chart analysis, or workload adjustment on a single set of data, as explained above, it clearly does not teach the concept of performing such analyses on different data sets and simultaneously displaying charts resulting from the analyses performed on different data sets.

J. The Examiner has failed, with regard to the rejection of claim 27 under 35 U.S.C. § 103(a) as being unpatentable over Jensen in view of Pfeiffer, to establish the requisite *prima facie* case of obviousness because the Examiner has failed to site a reference or combination of references that teach or suggest each limitation of claim 27.

Claim 27 depends from claim 12, therefore the arguments set forth above in relation to claim 1—which also apply to claim 12—apply to claim 27. In addition to failing to teach or suggest all of the limitations of claim 1, the prior art further fails to teach or suggest the limitations recited in claim 27. Claim 27 further recites the step of "correlating a number of events with a number of working employees to determine if the number of events is proportional with the number of working employees."

This aspect of the invention is a form of workload adjustment, which is discussed above in the arguments against the rejection of claim 1. Because the prior art references do not teach the general concept of making workload adjustments to data, they clearly fail to teach or suggest the specific step of "correlating a number of events with a number of working employees to determine if the number of events is proportional with the number of working employees."

K. Conclusion

Regarding the rejection of claims 1 and 12 under 35 U.S.C. § 103(a), the Examiner has failed to cite a prior art reference or combination of references that teach or suggest *a computer-readable medium encoded with a code segment operable to enable a computer to perform date gap analysis and control chart analysis on the formatted data and make workload adjustments thereto to produce an analysis output, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, and wherein the output indicates a value for each elapsed time and a value for the average elapsed time* and a *second input device operable to allow a user to request a more specific analysis of at least one identified event, with the identified event being user-selected from the display.*

Regarding the rejection of claims 7 and 17 under 35 U.S.C. § 103(a), the Examiner has failed to cite a prior art reference or combination of references that teach or suggest *the identified portion being selected from the chart.*

Regarding the rejection of claim 11 under 35 U.S.C. § 103(a), the Examiner has failed to cite a prior art reference or combination of references that teach or suggest *the more specific analysis involving performing date gap analysis, control chart analysis, and workload adjustment on the identified portion of the data.*

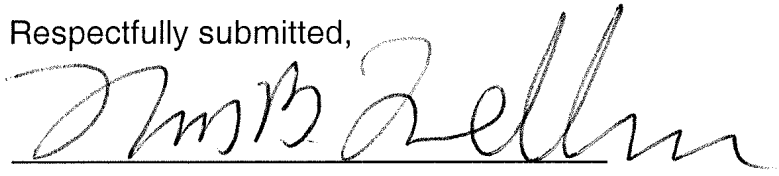
Regarding the rejection of claim 20 under 35 U.S.C. § 103(a), the Examiner has failed to cite a prior art reference or combination of references that teach or suggest the step of *performing date gap analysis, control chart analysis, and workload adjustment on the identified event, as in step (c), and displaying the resulting chart.*

Regarding the rejection of claim 21 under 35 U.S.C. § 103(a), the Examiner has failed to cite a prior art reference or combination of references that teach or suggest the step of *responding to a request to perform steps (c) through (e) on different data sets by performing steps (c) through (e) on the different data sets and displaying simultaneously the resulting charts.*

Regarding the rejection of claim 27 under 35 U.S.C. § 103(a), the Examiner has failed to cite a prior art reference or combination of references that teach or suggest the step of *correlating a number of events with a number of working employees to determine if the number of events is proportional with the number of working employees.*

Accordingly, reversal of the Examiner's rejections is proper, and such favorable action is solicited.

Respectfully submitted,

By 

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VIII. Claims Appendix

1. A system for facilitating statistical analysis of events, the system comprising:

a first input device operable to receive raw data regarding the events, including the nature, place, time, and date of each event, and convert the raw data into formatted data having a suitable electronic format;

a memory storage device operable to store the formatted data;

a computer-readable medium encoded with a code segment operable to enable a computer to perform date gap analysis and control chart analysis on the formatted data and make workload adjustments thereto to produce an analysis output, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, and wherein the output indicates a value for each elapsed time and a value for the average elapsed time;

a display device operable to display the analysis output; and

a second input device operable to allow a user to request a more specific analysis of at least one identified event, with the identified event being user-selected from the display.

2. The system as set forth in claim 1, the input device receiving data on a daily basis.

3. The system as set forth in claim 1, the events involving employee illness and injury.

4. The system as set forth in claim 1, the analysis output being displayed in chart format.

5. The system as set forth in claim 1, the analysis output being displayed in tabular format.

6. The system as set forth in claim 1, the second input device being selected from the group consisting of: computer mice, trackballs, light pens, touch sensitive screens, keyboards.

7. A combination of computer code segments stored on computer readable memory and executable using at least one computer and operable to facilitate statistical analysis of events, the combination of code segments comprising:

a code segment for receiving data regarding the events;

at least one code segment for performing date gap analysis and control chart analysis on the data and for adjusting the data for workload and for producing an analysis output, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, and wherein the output indicates a value for each elapsed time and a value for the average elapsed time;

a code segment for displaying the analysis output as a chart;

a code segment for receiving input requesting a more specific analysis of at least one identified portion of the data, with the identified portion being selected from the chart; and

a code segment for performing the more specific analysis, producing detailed analysis output, and displaying the detailed analysis output.

8. The combination of computer code segments of claim 7, with at least one of the code segments being stored and executed on a first computer, and at least one of the code segments being stored and executed on a second computer, and the first and second computers being operable to communicate with each other.

9. The combination of computer code segments set forth in claim 7, further comprising a code segment for separating the data into a plurality of data sets based upon a predetermined separation criteria.

10. The combination of computer code segments of claim 7, the events involving employee illness and injury.

11. The combination of computer code segments of claim 7, the more specific analysis involving performing date gap analysis, control chart analysis, and workload adjustment on the identified portion of the data.

12. A method for facilitating monitoring and analysis of events, the method comprising the steps of:

(a) obtaining data regarding the events;

(b) formatting the data in a common format;

(c) performing date gap analysis on the data with a computer processor, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time;

(d) performing control chart analysis on the data with a computer processor;

(e) adjusting the data for work load;

(f) displaying the data, including a value for each elapsed time and a value for the average elapsed time; and

(g) responding to a request for a more specific analysis of at least one event selected from the displayed data by displaying information specifically regarding the identified event.

13. The method as set forth in claim 12, step (a) being performed on a daily basis.

14. The method as set forth in claim 12, the data including the nature, place, time, and date of each event.

15. The method as set forth in claim 12, the events involving employee illness and injury.

16. The method as set forth in claim 12, step (g) including performing date gap analysis, control chart analysis, and work load adjustment on the selected event and displaying the resulting chart.

17. A method for facilitating statistical analysis of events, the analysis being performed on data representing different types of events, the method comprising the steps of:

(a) obtaining the data regarding the events, with the nature of the data depending on the type of event;

(b) storing the data in different data sets;

(c) producing output by performing date gap analysis and control chart analysis on at least one data set with a computer processor and adjusting the data set for workload, wherein the date gap analysis includes determining an elapsed time between consecutive events and an average elapsed time, and wherein the output indicates a value for each elapsed time and a value for the average elapsed time;

(d) displaying the output as a chart; and

(e) responding to a request for a more specific analysis of at least one identified event in the data set, the identified event being selected from the chart produced in step (d), by displaying information specifically regarding the identified event.

18. The method as set forth in claim 17, step (a) being performed on a daily basis.

19. The method as set forth in claim 17, the events involving illness and injury.

20. The method as set forth in claim 17, step (e) including performing date gap analysis, control chart analysis, and workload adjustment on the identified event, as in step (c), and displaying the resulting chart.

21. The method of as set forth in step 17, further including the step of (f) responding to a request to perform steps (c) through (e) on different data sets by performing steps (c) through (e) on the different data sets and displaying simultaneously the resulting charts.

22–26. (Cancelled)

27. The computer-readable medium as set forth in claim 12, wherein step (e) further includes the step of:

(e1) correlating a number of events with a number of working employees to determine if the number of events is proportional with the number of working employees.

IX. Evidence appendix

None.

X. Related proceedings appendix

None.